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TUNGSTEN IN SEPTEMBER 1996

Based upon net production of intermediate tungsten products, including metal powder and tungsten carbide powder produced from hydrogen reduced metal powder, the U.S. industrial tungsten activity for September 1996 increased about 2% compared with that of August 1996, according to the U.S. Geological Survey. U.S. industrial tungsten activity for the first 9 months of 1996 was identical to that of the same period of 1995. Reported consumption of tungsten in all end-use products through September 1996 increased by approximately 1% compared with reported consumption of tungsten through the same period of 1995.

August 1996 trade data are included in this issue. Trade data for September 1996 will appear in a subsequent issue.

The combined wolframite and scheelite prices from <u>Metal Bulletin</u> were:

Low \$40/mtu WO₃ (\$36.29/stu WO₃), October 1-31, 1996 High \$55/mtu WO₃ (\$49.90/stu WO₃), October 1-31, 1996

Update

The Chinese Government will purchase 3,000 metric tons of fine tungsten concentrate from major state-owned mines for their stockpile. This amount of tungsten ore is equivalent to 2 months output by state-owned mines. The first 2,000 metric tons of tungsten ore is being purchased, and the remaining 1,000 metric tons will be bought in 1997.

¹Platt's Metals Week, Nov. 11, 1996, p. 8.

TABLE 1 U.S. SALIENT TUNGSTEN STATISTICS 1/

(Metric tons, tungsten content)

		Concentrate			Intermediate products			
	Reported	Imports for	Stocks, end of	Reported scrap	Net produc-	Reported	Stocks, end of	
Period	consumption	consumption	period 2/	consumption	tion 3/	consumption 4/	period 5/	
1995: p/				-				
January-December	6,320	4,180	631	2,350	8,190	11,900	1,290	
1996:	_							
January		310	486	261	718	993	1,220	
February	475	162	438	186	933	1,000	1,360	
March	504	155	559	223	845	957	1,440	
April	580	148	694	236	787	973	1,510	
May	415	403	654	200	303	1,070	1,550	
June		365	721	199	473	947	1,560	
July	506	383	633	273	866	935	1,780	
August	415	183	695	250	525	1,110	1,640	
September	422	NA	601	134	538	836	1,550	
Total	4,350	2,110	XX	1,960	5,980	8,820	XX	

- p/ Preliminary. NA Not available. XX Not applicable.
- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ Reported by consumers.
- 3/ Net production of tungsten metal powder, tungsten carbide powder, chemicals, and other products.
- 4/ Includes data on tungsten carbide powder from secondary sources.
- 5/ Reported by producers.

TABLE 2 U.S. PRODUCTION, CONSUMPTION, AND STOCKS OF AMMONIUM PARATUNGSTATE, BY MONTH 1/

(Metric tons, tungsten content)

Period	Production	Consumption	Stocks, end of period 2/	
1995: p/				
January-December	2,580 3/	7,690	338	
1996:				
January	565	598	370	
February	W	630	366	
March	556	782	357	
April	W	742	319	
May	W	619	299	
June	W	531	391	
July	677	639	W	
August	592	673	576	
September	551	572	558	
Total	2,390	5,210	XX	

p/ Preliminary. $\,$ W $\,$ Withheld to avoid disclosing company proprietary data. $\,$ XX $\,$ Not applicable.

- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ Producers and consumers.
- 3/ Excludes seven months of withheld data.

 $\begin{tabular}{ll} TABLE & 3 \\ U.S. & PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS & 1/ \\ \end{tabular}$

(Metric tons, tungsten content)

	1	Net production 2/				
		1996	<u> </u>	Stocks at end of period		
			Year		1996 September	
Product	1995 p/	September	to date	1995 p/		
Metal powder	2,910	227	3,070	818	953	
Tungsten carbide powder	=					
(made from metal powder)	5,280	311	2,910	348	452	
Cast and crystalline	_					
carbide powder; other	W			W	W	
Chemicals	W	W	W	126	141	
Total	8,190	538	5,980	1,290	1,550	

p/ Preliminary. W Withheld to avoid disclosing company proprietary data.

TABLE 4 U.S. REPORTED CONSUMPTION, BY END USE, AND CONSUMER STOCKS OF TUNGSTEN PRODUCTS IN SEPTEMBER 1996 1/

(Metric tons, tungsten content)

		Tungsten	Tungsten	Scheelite		Other		Total
	Ferro-	metal	carbide	(natural,	Tungsten	tungsten		year to
End use	tungsten	powder	powder	synthetic)	scrap 2/	materials 3/	Total	date
Steel:								
Stainless and heat-resisting	W		W		W		W	W
Alloy	2						2	15
Tool	18						18	139
Total	20		W		W		20	154
Superalloys		W	2		14	1	17	164
Alloys (excludes steels and superalloys):								
Cutting and wear-resistant materials		W	478		W	1	479	5,020
Other alloys 4/		W	W		W		W	1
Mill products made from metal powder		W					W	360
Chemical and ceramic uses		W	W			W	W	W
Miscellaneous and unspecified	4	39	277		W	W	320	3,120
Total	24	39	757 5/		14	1	836	XX
Total consumption, year to date	247	540	7,700 5/		134	200		8,820
Stocks, September 30, 1996	34	43	397 5/	1	25	14	514	XX

W Withheld to avoid disclosing company proprietary data. XX Not applicable.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Gross production less quantity used to make other products in table.

 $^{1/\}mbox{ Data}$ are rounded to three significant digits; may not add to totals shown.

 $^{2/\} Does\ not\ include\ that\ used\ in\ making\ primary\ tungsten\ products.$

^{3/} Includes tungsten chemicals.

^{4/} Includes welding and hard-facing rods and materials and nonferrous alloys.

^{5/} Based on reported consumption plus information from secondary sources; includes estimates.

 ${\bf TABLE~5} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~TUNGSTEN,~BY~COUNTRY~1/}$

(Metric tons, tungsten content)

	Con-			Lumps,				Total
Period and country	cen-	Ammonium	Ferro-	grains,	Tungsten			year to
of origin	trate	tungstates	tungsten	powders	carbide	Other e/ 2/	Total	date
1995:				•				
Total	4,180	1,290	652	312	476	3,260	10,200	XX
1996:								
June	365	63	15	16	18	249	726	XX
July	383	130	43	12	22	381	972	XX
August:								
Australia								3
Austria						2	2	14
Belgium				(3/)			(3/)	3
Bolivia								312
Canada				1	2	(3/)	3	35
China		231	29		12	113	385	2,920
Czech Republic								9
Germany		1		4	10	(3/)	15	150
Hong Kong					3	(3/)	3	194
Hungary						1	1	5
Israel						(3/)	(3/)	7
Japan				1	1	2	4	57
Kazakstan								126
Korea, Republic of								6
Mexico						1	1	46
Netherlands	34						34	88
Peru	69						69	318
Portugal	73						73	404
Russia	8			40			48	906
Sweden			(3/)	1		(3/)	1	41
Switzerland						(3/)	(3/)	2
Thailand								11
United Kingdom				20		1	21	396
Uzbekistan								30
Total	183	232	29	68	29	120	661	XX
Total, year to date	2,110	1,080	381	303	214	1,990	XX	6,080

e/ Tungsten content estimated in part. XX Not applicable.

Note: Imports of waste and scrap in August 1996 totaled 199 metric tons, tungsten content.

Source: Bureau of the Census.

 $^{1/\,}Data$ are rounded to three significant digits; may not add to totals shown.

^{2/} Includes calcium, potassium, and sodium tungstates, mixtures and materials in chief value tungsten, tungsten oxide, tungstic acid, unwrought ingots and shot, other unwrought tungsten and materials, wrought tungsten, and other tungsten compounds.

^{3/} Less than 1/2 unit.

(Metric tons, tungsten content)

Donied and accountmy	Con-	Ammonium	Metal	Tumastan			Total
Period and country	cen-		powder e/	Tungsten	045	T-4-1	year to date
of destination 1995:	trate	tungstates	powder e/	carbide	Other e/ 2/	Total	date
	5	220	101	1 670	260	2.760	vv
Total	5	238	484	1,670	369	2,760	XX
1996:	2	17	25	172	2.4	252	7/7/
June	3	17	25	173	34	252	XX
July	1		24	78	19	120	XX
August:					(2.5	(2.0	
Argentina	-				(3/)	(3/)	3
Australia			(3/)	(3/)	(3/)	1	12
Austria							21
Bahamas					1	1	1
Belgium				(3/)	(3/)	(3/)	8
Brazil			(3/)	1	1	2	7
Canada			2	20	2	24	292
China			(3/)		(3/)	(3/)	23
Denmark				2		2	3
France				7	(3/)	7	56
Germany			5	11	2	18	317
Guatemala							1
Honduras							18
Hong Kong			(3/)	1	(3/)	1	7
India					2	2	11
Ireland				(3/)		(3/)	3
Israel				8	(3/)	9	45
Italy				14	(3/)	14	87
Japan				2	2	4	107
Korea, Republic of				(3/)	(3/)	(3/)	10
Luxembourg				(3/)	(3/)	(3/)	11
Mexico	(3/)		2	(3/)	2	4	28
Netherlands	(3/)			(3/)	(3/)	(3/)	8
Portugal				1	(3/)	(3/)	2
Saudi Arabia						1	1
				(3/)	(3/)	(3/)	15
Singapore South Africa				` ′		, ,	15
South Africa					(3/)	(3/)	
Spain					1	1	7
Sweden				10	(3/)	10	74
Switzerland				2	(3/)	2	6
Taiwan				1	(3/)	1	34
United Kingdom				30	3	33	117
Venezuela				1		1	3
Vietnam			2			2	2
Total	(3/)		12	113	19	140	XX
Total, year to date	17	66	175	896	204	XX	1,360

e/ Tungsten content estimated in part. XX Not applicable.

Note: Exports of waste and scrap in August 1996 totaled 30 metric tons, tungsten content.

Source: Bureau of the Census.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Includes calcium, potassium, and sodium tungstates, mixtures and materials in chief value tungsten, tungstic acid, unwrought ingots and shot, other unwrought tungsten and materials, wrought tungsten, and other tungsten compounds.

^{3/} Less than 1/2 unit.